Original Research Article

The Impact of Fiscal Policy on Unemployment in Nigeria

Michael O. Enyoghasim (PhD)[1*], Hycenth O. R. Ogwuru (PhD)[2], Glory C. Agu[3], Abieyuwa E. Igbinedion[4]

[1]Department of Economics and Dev Studies, Alex Ekwueme Federal University Ndufu, Nigeria
[2]Department of Economics, Novena University Ogume, Delta State, Nigeria
[3]Department of Economics and Dev. Studies, Alex Ekwueme Federal University Ndufu, Nigeria
[4]Department of Economics and Statistics, University of Benin, Nigeria

Abstract

The study examined the impact of fiscal policy on unemployment in Nigeria. The main objective of the study is to find out the relationship between fiscal policy like recurrent expenditure, capital expenditure, debt servicing and some variables like inflation rate, interest rate spread, gross fixed capital formation on unemployment. The study used expo-factor research design with Auto Regressive Distributed Lag (ARDL) in analyzing the data collected from CBN statistical bulletin. The result revealed that government capital expenditure, gross fixed capital formation and debt servicing impacted significantly on unemployment, while inflation rate, interest rate and recurrent government expenditure had insignificant impact on unemployment. Based on the findings, the study concludes that fiscal policy has a significant impact on unemployment. It was recommended that government expenditure should be channeled towards productive sectors which are capable of absorbing the teeming unemployed in the society and not luxuries and stop further acquiring more loans.
Keywords: fiscal policy, unemployment rate, capital expenditure, debt servicing, ARDL.
Jel Classification : E_{62}, E_{63}.

INTRODUCTION

Nigerian government over the years had reliably set out on different macroeconomic policy options in order to straight the economy on the way of growth and development. One of the policy options the government frequently utilized is fiscal policy. Fiscal policy alludes to a deliberate effort by the government to operate its expenditure, taxes and public debts to complement macroeconomic goals of the governments among which is economic growth. Several factors have militated against the development and growth of the economy which include high rate of unemployment, inflation, poor infrastructures and a host of other issues which required the regular government mediation in the management of the economy through its fiscal policies. Fiscal policy is indisputably one of the profoundly admired policies utilized by the government to monitor and accomplish 'macroeconomic stability of the economy of most developing nations (Siyan and Debayo, 2005). Fiscal policy, thus is the means by which a government modifies its level of spending in order to monitor and control a country's economy.

Alex and Ebieri (2014) noted that government intervention in the economy through fiscal policy have been to manipulate the receipt and expenditure sides of its budget in order to achieve certain national objectives. As Abubakar (2015) opined, the use of fiscal policy is very paramount in every society, most especially Less Developed Countries (LDC's) as a major tool for economic stabilization and enhancing development. The importance of fiscal policy in impacting the dynamics of an economy was echoed by Arnelyn *et al*., (2014) who asserted that; in the short term, counter-cyclical fiscal expansion can help support aggregate demand and growth during cyclical downturns, conversely, fiscal contraction can cool down an economy that is growing at an unsustainable pace and thus faces the risk of overheating. In the medium and long term, fiscal policy also plays a significant role in the economy. Although there have been numerous studies on fiscal policy as it relates to economic growth, much attention has not been given to its effect on unemployment despite its importance in theory and practice.

One of the objectives of a modern government is to moderate unemployment and make the environment favorable for investors to put resources into use to create employment and ensure price stability in the economy through compelling and appropriate accomplishment of fiscal policies. Fiscal policy is the government's management of the economy through the control of its wage and spending energy to complete some pursued macroeconomic goals amongst which are price stability, negligible unemployment rate and economic growth (Ozurumba, 2012).

From 1980's till 2020 unemployment rate in Nigeria has been on the increase. According to statistical reports, unemployment rate in Nigeria stood at 27.9% in 1980, 30% in 1983, 40% in 1995, 51% in 2011, and 57.04% in 2016, but surprisingly, Nigeria's GDP has been increasing. The figure below shows the trend of unemployment rate in Nigeria from 1990 – 2020.
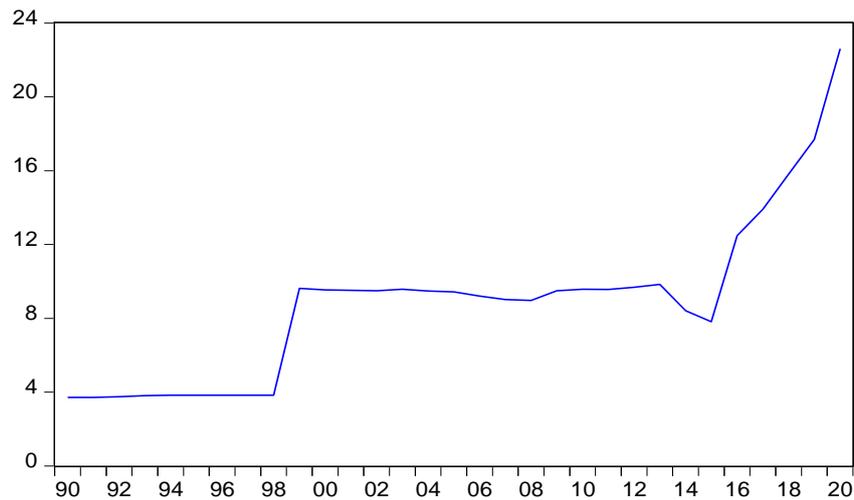

Fig 1: Growth rate of Unemployment in Nigeria from 1990-2020

The issue of unemployment in Nigeria is not just rooted in the incidence of poverty, but attributable to poor policy frame work and implementation as well as the management of the economy. For instance, prior to the introduction of SAP, the index of poverty and unemployment was contained in a single digit. However, the introduction of SAP witnessed the deterioration of the economy as it exposed the dangers of not being industrialized or having a working manufacturing sector. The SAP policy led to rising inflation and high cost of living, coupled with huge fiscal deficits. Furthermore, the need for rapid infrastructural development led to increased borrowing and unbridled spending that could not be sustained by fiscal policy initiatives; thus, leaving the economy to economic problems of borrowing and debt servicing.

Obayori (2014) opines that the reduction in the rate of unemployment is the most difficult challenge facing any country in the developing world where on the average majority of the population is considered poor. A critical examination of the data on unemployment in Nigeria between 1960 and to mid-1980 shows the modest level of unemployment. This was because Nigeria, as at that time was in economic boom, hence; unemployment was something that wasn't taken seriously.

Sadly, over the year's unemployment has increased tremendously in Nigeria. It is a social and economic malady that has eaten deep into the Nigerian economy. The effect has been extreme on the government and her citizens. It decreases the way of life of individuals from the society. It has been confirmed that the instability, revolt and psychological oppression assaulting the North East region of Nigeria and also militancy, abducting, sea piracy and pipe line vandalism in the Niger Delta are as a result of high rate of unemployment in the nation (Egbulonu and Amadi, 2016). Despite the various strategies and palliatives put in place by the government to reduce the incidence of unemployment, sadly the effects still rage on in the face of a bourgeoning population growth rate. Does this mean that fiscal measures have not been effective in curbing the effects of unemployment in the country? This research question forms the fulcrum for this study in pursuit of an empirical outcome.

LITERATURE AND EMPIRICAL REVIEW
The classical economists believed that there was always full-employment in the economy. In the case of unemployment, a general cut in money wages would take the economy to the full employment level. Their argument runs as follows:
In a competitive economy when money wages are reduced, they lead to reduction in the cost of production and consequently, to the lower prices of products, when prices fall, the demand for products will increase and sales will be pushed up. Increased sales will necessitate

the employment of more labour and ultimately, full employment will be attained.

The classical view is based on the assumption that changes in money wages are directly related and proportional to real wages. So, when money wage is reduced, the real wage is also reduced to the same extent. Consequently, unemployment is reduced and full employment prevails.

The Keynesians on the other hand accepted the classical postulation that both the Law of Diminishing Returns and the Theory of Marginal productivity operated, but stated that since every worker is paid the wage equal to the marginal product and the law of diminishing returns operates in the industry, real wages must decline for employment to increase. But this does not mean that unemployment was due to the refusal of workers to accept wages equal to their marginal product. According to Keynes, unemployment resulted from the lack of aggregate demand. It is demand that determines employment and employment determines the real wage rate and not the other way around.

Keynes challenged the classical view that private enterprise economy automatically ensures full employment. On the other hand, he said that employment depends on effective demand and there is no guarantee that there will always be adequate effective demand to generate full employment and when there is unemployment, the classical prescription of public finance is no longer valid (Dewett and Navalur, 2012). The Keynesian theory of fiscal policy proposes government intervention as a counter-cyclical measure. Keynesian theory questioned the equilibrating tendencies of market forces and maintained that, if left to themselves, the market forces tend to lead the economy to a stable level of under-employment equilibrium (Tyagi, 2013). Under the Keynesian framework, the aggregate demand function of employment does not automatically adjust itself to the aggregate supply function of employment, so also is demand and supply of output; this adjustment can only be achieved through a positive and dynamic operation of fiscal policy.

In the same vein, Keynes believed that the government has to play the positive role of regulating and controlling the economy by means of taxes and expenditure. Abu and Abdullahi (2010) asserted that in the Keynesian model, an increase in government expenditure leads to a higher economic growth. For the Keynesian theory, fiscal policy is a technique to attain and maintain the level of full employment by manipulating public expenditure and revenue in such a way so as to keep equilibrium between effective demand and supply of goods and services. Dewett and Navalur (2012) noted that if depression occurs, fiscal policy should help in increasing demand and an increase in demand translates to increase in output. For this purpose, the government can increase its expenditure and spend more on public works. This will provide employment to more people. Or else, the government can increase its expenditure on subsidies to producers of mass consumption commodities so as to increase consumer's spending. Similarly, the government can lower its tax rates so as to stimulate consumption and investment. Thus, a budget deficit during a depression is a positive help in fighting unemployment and stimulating output growth.

Various researchers have embarked on surveys on fiscal policy as fundamental in stabilization and repositioning the economy. But there are disparities in findings due to the nature and pattern of economic system.

For instance, Njoku and Ihugba (2011) observed the *Relationship between unemployment and growth in Nigeria* (1985-2009). One noteworthy discovery of the review is that the economy developed by 55.5 percent between 1991-2006 and the population expanded by 36.4 percent. This should typically have come about to a reduction in the rate of unemployment yet rather unemployment increased by 74.8 percent.

Adawo *et al.*, (2012) reviewed matters relating with high unemployment rate in Nigeria. The review surveyed that labor force in Nigeria matured at more or less a steady rate of 0.3% consistently gross domestic product (GDP) growth rate matured at 3.5% over a time of 33 years, recommending that the Nigerian economy encountered a jobless progress. The review likewise noticed that the reasons for unemployment in Nigeria include: poor infrastructure; non- diversification of the economy; insecurity and poor educational system that does not promptly deliver employable graduates.

Danjuma and Bala (2012) investigated The Role of Governance in Employment Generation in Nigeria. The review employed primary data obtained using interviews. The findings of the study demonstrated that unemployment rate in Nigeria had made pressure and hatred between those who are well off and have not prompting to mutual conflicts; brought about the emergence of militants' groups (like the Boko Haram order and Niger Delta militant), prostitution, armed robbery and child trafficking, constituting hiccups to security of lives and properties. The review prescribed that investment in education will help in skills development and training. Meanwhile, Obayori (2014) opined that the reduction in the rate of unemployment is the most difficult challenge facing any country in the developing world where on the average majority of the population is considered poor.

Elizabeth (2013) examined *Fiscal Deficit and Macroeconomic Aggregates in Nigeria for the period 1980 to 2010*. The study employed the Ordinary Least Square in estimating the equation and the co-integration

test using the Engle Granger procedure. She discovered that fiscal deficit did not significantly affect macroeconomic output and the result also shows a bilateral causality relationship between government deficit and unemployment. The empirical findings showed that fiscal deficits did not significantly affect macroeconomic output and shows a bilateral causality relationship between government deficit and unemployment.

Ogwuru (2008), investigated the *Dynamics of Government Expenditure and Unemployment Problems in Nigeria; 1970 – 2006.* Using econometric methods of Cointegration and Error Correction Method (ECM), the empirical study shows that there exists a long run relationship between government expenditure and unemployment in Nigeria. It further established a positive significant relationship between unemployment and government capital expenditure.

Amassoma and Nwosa (2013) *studied The Relationship Between Unemployment Rate and Productivity Growth in Nigeria for the period 1986 to 2010.* The review used co-integration and error correction model approach. Results of the study suggested that there is still the need for government to make serious steps against the rising unemployment rate, since unemployment is a noteworthy hindrance to social progress and results in misuse of trained manpower. They demonstrated that there is a relationship between unemployment rate and inflation rate.

Nwosa (2014) studied the *Impact of Government Expenditure on Unemployment and Poverty Rates in Nigeria for the period 1981 to 2011.* Utilizing an Ordinary Least square (OLS) estimation approach, the review proved that government expenditure has positive significant impact on unemployment rate, but negatively insignificant on poverty rate.

Egbulonu and Amadi (2016) investigated the Effect of fiscal policy on unemployment in Nigeria. In their study they utilized Government expenditure, Government debt stock and Government tax to capture fiscal policy variables and regressed them on unemployment rate using the Error Correction Model. Their result showed that there exists a negative relationship between fiscal policy and unemployment rate in Nigeria in the face of a long run relationship between fiscal policy and unemployment.

Model Specification

This study seeks to improve on the previous study by Nwosa (2014) on "The impact of government expenditure on unemployment and poverty rates in Nigeria for the period 1981 to 2011' by re-modelling unemployment as a function of fiscal policy. Thus:

UNEMRATE=f (INFRATE, INTSPREAD, RECEXP, CAPEXP, GFCF, DSERV)

Specifically, the econometric relationship simplified as follows:

$$\text{UNEMRATE} = \beta_0 + \beta_1 \text{INFRATE} + \beta_2 \text{INSPREAD} + \beta_3 \text{RECEXP} + \beta_4 \text{CAPEXP} + \beta_5 \text{GFCF} + \beta_6 \text{DSERV} + \mu$$

Where:
UNEMRATE = Unemployment rate
INFRATE = Inflation rate.
INTSPREAD = Interest rate spread.
RECEXP = Government recurrent expenditure.
CAPEXP = Government capital expenditure
GFCF = Gross fixed capital formation
DSERV = Debt servicing
μ = White noise error term; β_0= constant term.
$b_1 - b_5$ are coefficients of parameters estimates and b_0 is the intercept of the model. 'e' is the white noise error term. The secondary data employed were obtained from the Central Bank of Nigeria (CBN) Statistical Bulletin (2020) Edition and Online Database.

Unit Root Test

VARIABLE	ADF STAT. (LEVEL)	5% CRITICAL VALUE	ADF STAT (1^{ST}DIFF)	5% CRITICAL VALUE	REMARK
LNUNEMRATE	-0.492165	-2.963972	-5.230689*	-2.967767	I(1)
LNINFRATE	-2.969684	-2.967767	-4.206710*	-2.967767	I(1)
LNINTSPREAD	-4.541693*	-2.967767	-5.494733	-2.971853	I(0)
LNRECEXP	-1.893139*	-2.967767	-7.378927*	-2.967767	I(1)
LNCAPEXP	-0.773468	-2.963972	-5.096549*	-2.967767	I(1)
LNGFCF	-6.433360	-2.967767	-10.60930	-2.971853	I(0)
LNDSERV	-1.039802	-2.967767	-6.236371	-2.967767	I(1)

The Asterisks (*) is used to indicate stationarity at the 5% level of significance.

From the stationarity test above, the variables were stationary at I (0) and I (1); hence fit for model estimation.

Test for Cointegration: ARDL Bounds Test

H$_O$: There is no long run relationship in the model.

H$_1$: There is a long run relationship in the model.

F-Bounds Test		Null Hypothesis: No levels relationship		
Test Statistic	Value	Signif.	I(0)	I(1)
F-statistic	5.816471	10%	1.99	2.94
K	6	5%	2.27	3.28
		2.5%	2.55	3.61
		1%	2.88	3.99

Source: Researcher's compilation from E-views 10 Regression output.

Decision: Since F-statistic (5.816471) >I(0) and I(1) bounds; hence, there is evidence of long run relationship in the model at 5% level of significance.

Model Estimation

Dependent Variable: LNUNEMRATE				
Method: ARDL				
Date: 07/20/21 Time: 06:54				
Sample (adjusted): 1993 2020				
Included observations: 28 after adjustments				
Maximum dependent lags: 1 (Automatic selection)				
Model selection method: Akaike info criterion (AIC)				
Dynamic regressors (3 lags, automatic): LNINFRATE LNINTSPREAD				
LNGFCF LNRECEXP LNCAPEXP LNDSERV				
Fixed regressors: C				
Number of models evaluated: 4096				
Selected Model: ARDL (1, 2, 2, 3, 3, 3, 1)				
Variable	Coefficient	Std. Error	t-Statistic	Prob.*
LNUNEMRATE(-1)	0.063649	0.176276	0.361077	0.7304
LNINFRATE	0.293805	0.189375	1.551444	0.1718
LNINFRATE(-1)	-0.206921	0.169418	-1.221362	0.2678
LNINFRATE(-2)	0.241488	0.110505	2.185320	0.0715
LNINTSPREAD	-0.182034	0.145748	-1.248964	0.2582
LNINTSPREAD(-1)	0.222816	0.163034	1.366690	0.2207
LNINTSPREAD(-2)	0.151424	0.125143	1.210005	0.2718
LNGFCF	0.027524	0.045762	0.601450	0.5696
LNGFCF(-1)	0.066347	0.072483	0.915340	0.3953
LNGFCF(-2)	-0.044964	0.033642	-1.336547	0.2298
LNGFCF(-3)	0.121131	0.056959	2.126644	0.0776
LNRECEXP	0.655521	0.132583	4.944223	0.0026
LNRECEXP(-1)	0.108601	0.185201	0.586395	0.5790
LNRECEXP(-2)	-0.013444	0.148617	-0.090461	0.9309
LNRECEXP(-3)	-0.762551	0.177301	-4.300880	0.0051
LNCAPEXP	0.159263	0.127609	1.248051	0.2585
LNCAPEXP(-1)	0.248304	0.244183	1.016876	0.3484
LNCAPEXP(-2)	-0.474299	0.249532	-1.900752	0.1061
LNCAPEXP(-3)	0.686576	0.192311	3.570127	0.0118
LNDSERV	-0.013229	0.022474	-0.588619	0.5776
LNDSERV(-1)	0.144739	0.033168	4.363849	0.0048
C	-2.707568	0.616849	-4.389351	0.0046
R-squared	0.988698	Mean dependent var		0.928394
Adjusted R-squared	0.949141	S.D. dependent var		0.209420
S.E. of regression	0.047228	Akaike info criterion		-3.236669
Sum squared resid	0.013383	Schwarz criterion		-2.189937
Log likelihood	67.31336	Hannan-Quinn criter.		-2.916672
F-statistic	24.99433	Durbin-Watson stat		2.657848
Prob(F-statistic)	0.000335			

Source: E-views 10 Regression output.

ARDL Error Correction Regression

ARDL Error Correction Regression				
Dependent Variable: D(LNUNEMRATE)				
Selected Model: ARDL (1, 2, 2, 3, 3, 3, 1)				
Case 2: Restricted Constant and No Trend				
Date: 07/20/21 Time: 06:54				
Sample: 1990 2020				
Included observations: 28				
ECM Regression				
Case 2: Restricted Constant and No Trend				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(LNINFRATE)	0.293805	0.066006	4.451200	0.0043
D(LNINFRATE(-1))	-0.241488	0.055359	-4.362238	0.0048
D(LNINTSPREAD)	-0.182034	0.066151	-2.751814	0.0332
D(LNINTSPREAD(-1))	-0.151424	0.055161	-2.745146	0.0335
D(LNGFCF)	0.027524	0.022864	1.203771	0.2740
D(LNGFCF(-1))	-0.076167	0.016272	-4.680875	0.0034
D(LNGFCF(-2))	-0.121131	0.018636	-6.500005	0.0006
D(LNRECEXP)	0.655521	0.064170	10.21535	0.0001
D(LNRECEXP(-1))	0.775994	0.086621	8.958512	0.0001
D(LNRECEXP(-2))	0.762551	0.099132	7.692258	0.0003
D(LNCAPEXP)	0.159263	0.060393	2.637110	0.0387
D(LNCAPEXP(-1))	-0.212277	0.078600	-2.700743	0.0355
D(LNCAPEXP(-2))	-0.686576	0.095769	-7.169124	0.0004
D(LNDSERV)	-0.013229	0.008602	-1.537772	0.1750
CointEq(-1)*	-0.936351	0.093254	-10.04086	0.0001
R-squared	0.934835	Mean dependent var		0.027860
Adjusted R-squared	0.864657	S.D. dependent var		0.087214
S.E. of regression	0.032085	Akaike info criterion		-3.736669
Sum squared resid	0.013383	Schwarz criterion		-3.022988
Log likelihood	67.31336	Hannan-Quinn criter.		-3.518489
Durbin-Watson stat	2.657848			
* p-value incompatible with t-Bounds distribution.				

ARDL Long Run Estimation

Selected Model: ARDL (1, 2, 2, 3, 3, 3, 1)				
Case 2: Restricted Constant and No Trend				
Date: 07/20/21 Time: 06:54				
Sample: 1990 2020				
Included observations: 28				
Conditional Error Correction Regression				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-2.707568	0.616849	-4.389351	0.0046
LNUNEMRATE(-1)*	-0.936351	0.176276	-5.311833	0.0018
LNINFRATE(-1)	0.328373	0.144397	2.274089	0.0633
LNINTSPREAD(-1)	0.192206	0.275290	0.698195	0.5112
LNGFCF(-1)	0.170037	0.140213	1.212706	0.2708
LNRECEXP(-1)	-0.011873	0.098780	-0.120192	0.9083
LNCAPEXP(-1)	0.619844	0.174205	3.558137	0.0120
LNDSERV(-1)	0.131510	0.036281	3.624747	0.0110
D(LNINFRATE)	0.293805	0.189375	1.551444	0.1718
D(LNINFRATE(-1))	-0.241488	0.110505	-2.185320	0.0715
D(LNINTSPREAD)	-0.182034	0.145748	-1.248964	0.2582
D(LNINTSPREAD(-1))	-0.151424	0.125143	-1.210005	0.2718
D(LNGFCF)	0.027524	0.045762	0.601450	0.5696
D(LNGFCF(-1))	-0.076167	0.067645	-1.125983	0.3032
D(LNGFCF(-2))	-0.121131	0.056959	-2.126644	0.0776

D(LNRECEXP)	0.655521	0.132583	4.944223	0.0026
D(LNRECEXP(-1))	0.775994	0.162943	4.762374	0.0031
D(LNRECEXP(-2))	0.762551	0.177301	4.300880	0.0051
D(LNCAPEXP)	0.159263	0.127609	1.248051	0.2585
D(LNCAPEXP(-1))	-0.212277	0.206353	-1.028711	0.3433
D(LNCAPEXP(-2))	-0.686576	0.192311	-3.570127	0.0118
D(LNDSERV)	-0.013229	0.022474	-0.588619	0.5776
* p-value incompatible with t-Bounds distribution.				
Levels Equation				
Case 2: Restricted Constant and No Trend				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
LNINFRATE	0.350694	0.164782	2.128228	0.0774
LNINTSPREAD	0.205271	0.300631	0.682801	0.5202
LNGFCF	0.181596	0.146812	1.236924	0.2623
LNRECEXP	-0.012680	0.106245	-0.119344	0.9089
LNCAPEXP	0.661979	0.202096	3.275573	0.0169
LNDSERV	0.140450	0.036818	3.814716	0.0088
C	-2.891618	0.731390	-3.953593	0.0075
EC = LNUNEMRATE - (0.3507*LNINFRATE + 0.2053*LNINTSPREAD + 0.1816				
*LNGFCF -0.0127*LNRECEXP + 0.6620*LNCAPEXP + 0.1404				
*LNDSERV -2.8916)				

Source: E-views 10 Regression output.

Long Run Analysis

LNINFRATE: has a positive relationship with UNEMRATE. However, it was insignificantly related to UNEMRATE at 5% level of significance. Hence, INFRATE has no significant impact on Unemployment growth of Nigeria in the long run.

LNINTSPREAD: has a positive relationship with UNEMRATE. However, it was insignificantly related to UNEMRATE at 5% level of significance. Hence, INTSPREAD has no significant impact on Unemployment growth of Nigeria in the long run.

LNGFCF: has a positive relationship with UNEMRATE. However, it was insignificantly related to UNEMRATE at 5% level of significance. Hence, GFCF has no significant impact on Unemployment growth of Nigeria in the long run.

LNRECEXP: has a negative relationship with UNEMRATE. However, it was insignificantly related to UNEMRATE at 5% level of significance. Hence, RECEXP has no significant impact on Unemployment growth of Nigeria in the long run.

LNCAPEXP: has a positive relationship with UNEMRATE. It was significantly related to UNEMRATE at 5% level of significance. Hence, CAPEXP has a significant impact on Unemployment growth of Nigeria in the long run.

LNDSERV: has a positive relationship with UNEMRATE. It was significantly related to UNEMRATE at 5% level of significance. Hence, DSERV has a significant impact on Unemployment growth of Nigeria in the long run.

Joint Test (ANOVA)
Ho:
LNINFRATE=LNINTSPREAD=LNRECEXP=LNCAPEXP=LNGFCF=LNDSERV=0
H$_1$:
LNINFRATE≠LNINTSPREAD≠LNRECEXP≠LNCAPEXP≠LNGFCF≠LNDSERV≠0

Findings: From the regression result, the F-prob. value is 0.000001 which is less than 0.05; hence we reject the null hypothesis and conclude that there is a joint impact of LNINFRATE, LNINTSPREAD, LNRECEXP, LNCAPEXP, LNGFCF and LNDSERV on Unemployment Growth Rate (UNEMRATE) at 5% level of significance/

Model Stability: CUSUM TEST
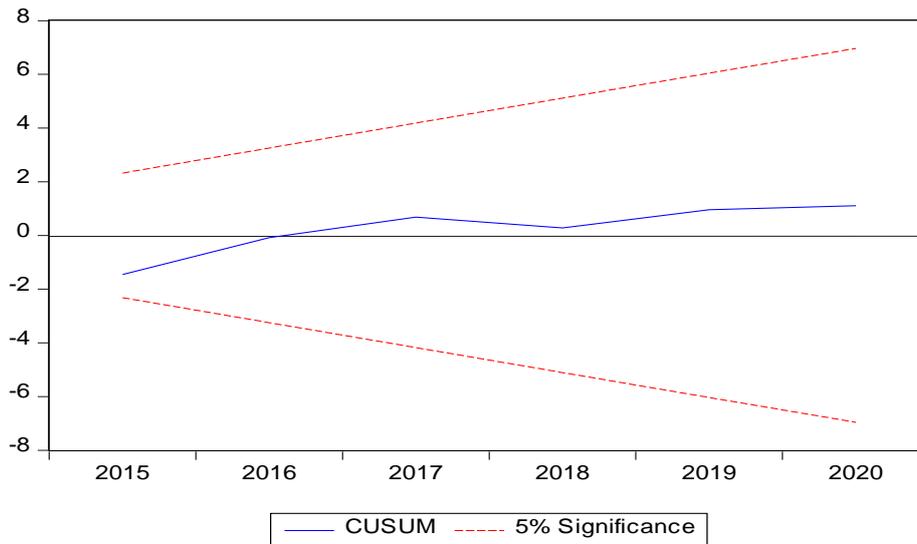
From the result above, the CUSUM line lies within the 5% bands; hence the model is stable at 5% level of significance.

Forecast Analysis
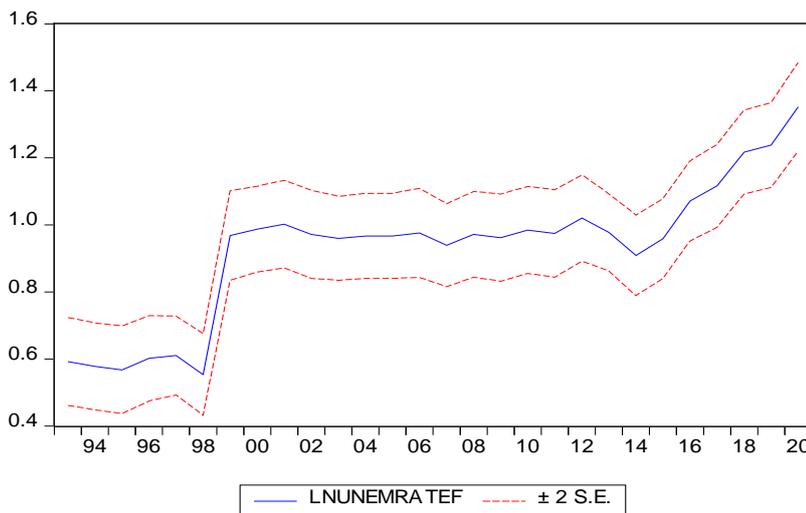
Forecast: LNUNEMRATEF	
Actual: LNUNEMRATE	
Forecast sample: 1990 2020	
Adjusted sample: 1993 2020	
Included observations: 28	
Root Mean Squared Error	0.021404
Mean Absolute Error	0.017346
Mean Abs. Percent Error	2.023875
Theil Inequality Coefficient	0.011256
Bias Proportion	0.000000
Variance Proportion	0.003962
Covariance Proportion	0.996038
Theil U2 Coefficient	0.184217
Symmetric MAPE	2.015212

From the forecast above, it can be seen that the forecast is not biased. The bias proportion is negligible i.e., 0.000000 and has a very small variance proportion of 0.003962. This means that most of the forecast errors are rightly attributable to the covariance proportion component which is 0.996038. i.e., 99.6%. The Theil inequality coefficient is a measure of the accuracy of a set of predictions generated from some sample model and is shown above to be 0.011256.i.e., 1.1% and it is closer to zero; hence; shows that the time series are not significantly different from another.; hence, validating the forecast.

Findings
- Capital expenditure, gross fixed capital formation and Debt servicing had significant relationships with unemployment rate at 5% level of significance in the long run;

- The study also showed the joint interaction between selected variables and unemployment rate to be significant at 5% level of significance;
- The ECM coefficient was found to be negative and statistically significant as the traces of disequilibrium could be corrected annually at a speed rate of 93.6% annually; and
- The model stability also showed stability and the forecast was in line when examined from the bias proportion, variance and covariance proportion and their coefficients respectively.

CONCLUSION AND RECOMMENDATIONS
Based on the findings, the study concludes that capital expenditure, gross fixed capital formation and debt serving which are instruments of fiscal policy has a significant impact on unemployment rate in Nigeria.

Based on the above findings the following recommendations were made:

i. Gross fixed capital formation should be targeted for increase by the government and the private sector. This should be pursued with concerted efforts as it has the capacity to absorb idle labour for increased productivity

ii. Debt servicing should be curtailed by reducing the incidence of external borrowing. This reduction will restructure the debt obligation and reduce mounting pressure of debt that indirectly puts pressure on economic growth and mounting pressure on employment of human and material factors in the economy. Government should intensify its activities in repayment of debts both domestic and foreign debts and stop further acquiring more loans.

iii. Nigerian Government should institute anti-corruption agencies that are independent of political powers in order to reduce corrupt practices and ensure judicious spending of allocated funds.

iv. The problem of corruption should be tackled seriously from public expenditure angles. The anti-corruption crusade must be extended to all levels of government and the private sector.

v. There should be reallocation of capital expenditure so as to enhance employment opportunities for the unemployed people. Capital expenditure should be directed towards the productive sectors like agriculture and manufacturing which are capable of absorbing the teeming unemployed in the society.

REFERENCES

- Abubakar, A. B. (2015). Dynamic Effects of Fiscal Policy on Output and Unemployment in Nigeria: An Econometric Investigation. *CBN Journal of Applied Statistics*, 7(2), 101-122.
- Alex, E. O., & Ebieri, J. (2014). Empirical analysis of the impact of fiscal policy on economic growth of Nigeria. *International Journal of Economics and Finance*, 6(6).
- Amassoma, D., &Nwosa, P. I. (2013). The impact of unemployment rate on productivity growth in Nigeria. *International journal of economics and management science*, 2(8), 1-13.
- Abu, N., & Abdullahi, U. (2010). Government expenditure and economic growth in Nigeria: A disaggregated analysis. Business and Economics Journal, 4. 120 Dynamic Effects of Fiscal Policy on Output and Unemployment in Nigeria: An Econometric Investigation.
- Arnelyn, A., Gemma, B.E., Minsoo, L., & Donghyun, P. (2014). Fiscal policy and economic growth in developing Asia. ADB Economics Working Paper Series No 412, October 2013.
- Adawo, A. M., Essien, E. B., & Ekpo, N. U. (2012). Is Nigeria's Unemployment Problem Unsolvable? *Current Research Journal of Social Sciences*, 4(6), 389- 395.
- Central Bank of Nigeria Statistical Bulletin (2020) Edition.
- Danjuma, A., & Bala, A. K. (2012). Role of Governance in Employment Generation in Nigeria. *Journal of Business and Management*, 3(3), 27-31.
- Dewett, K. K., & Navalur, M. H. (2012). Modern economic theory. New Delhi: S. Chand & company LTD.
- Dauda, R. O. (2010). Investment in Education and Economic Growth in Nigeria: Am Empirical Evidence. *International Research Journal of Finance and Economics*, 55, 58-169.
- Elizabeth, W. (2013). Fiscal Deficits and Macroeconomic Aggregates in Nigeria Kuwait Chapter of Arabian. *Journal of Business and Management Review*, 2(9).
- Egbulonu, K. G., & Amadi, K. W. (2016). Impact of Fiscal Policy on Inflation in Nigerian Economy. *International Journal of Innovative Development & Policy Studies*, 4(3), 53-60.
- Njoku, A., & Ihugba, O. A. (2011). Unemployment and Nigerian economic growth (1985-2009). In Proceedings of the International Conference on Teaching, Learning and Change (Organized by International Association for Teaching and Learning [IATEL]).
- Nwosa, P. I. (2014). Government Expenditure, Unemployment and Poverty Rates in Nigeria. *Journal of Research in National Development*, 12(1), 77-84.
- Obayori, J. B. (2014). Unemployment and Economic Growth in Nigeria. *Journal of Environment and Society*, 12(1,2).
- Ogwuru, H. O. R. (2008). Dynamics of Government Expenditure and Unemployment Problems in Nigeria: 1970 – 2006: A COINTERATION EXPOSITION "*Nigeria Journal of Economic and Financial Research*, 2(1), 42-60.
- Ozurumba, B. A. (2012). Fiscal Deficits and Inflation in Nigeria: The Causality Approach. *International Journal of Scientific & Technology Research*, 1(8).
- Siyan, P., & Adebayo, F. O. (2005). An Empirical Investigation of Stability and Money Demand in Nigeria: 1970-1999, *Nigerian Journal of Economics Development Matters*, 4(1).
- Tyagi, B. P. (2013). Public finance. Meerut: Jai Prakash Nath & Co.